

REMARKS

Claims 1-18 are currently pending in the application. Claims 1, 16, and 18 are in independent form.

Claims 1-3, 5-7, and 12-15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the King patent. Reconsideration of the rejection under 35 U.S.C. § 102(b), as anticipated by the King patent, as applied to the claims is respectfully requested. Anticipation has always been held to require absolute identity in structure between the claimed structure and a structure disclosed in a single reference.

In Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 231 U.S.P.Q. 81 (Fed. Cir. 1986) it was stated: "For prior art to anticipate under §102 it has to meet every element of the claimed invention."

In Richardson v. Suzuki Motor Co., Ltd., 868 F.2d 1226, 9 U.S.P.Q.2d 1913 (Fed. Cir. 1989) it was stated: "Every element of the claimed invention must be literally present, arranged as in the claim."

The Office Action states that the King patent discloses the recited hose assembly comprising a tubular first layer made of a polymeric material resistant to chemical and heat degradation, which can be provided with carbon black to dissipate electrical charge, a jacket layer disposed about the inner layer, and at least one aramid fiber braided layer disposed between the inner and jacket layers, wherein glass fibers can also be used in combination with the aramid fibers. The inner and jacket layers can be formed of a fluorocarbon material such as PTFE. Coupling means can be provided on the hose ends. However, when read more specifically, the King patent discloses a hose assembly including an inner layer 12, a braided layer attached to the exterior of the inner layer, and a polymeric dispersion of coating 14 which is coated on the braided layer 13. Numeral 11 as stated in column 2, lines 45-50, is a tubular member. The tubular member includes therein the inner organic polymeric liner 12 and the braided layer. A coating 14 is placed about

the braided layer and is used to adhere the braided layer to the inner liner 12. While the coating covers the yarn fibers of the braided layer, as stated in column 4, lines 58-63, the coating does not extend radially outward from the outer periphery of the braided layer. In fact, after the material has been coated, the yarn is discernable such that the braided layer merely has a thin coating thereupon. This is in contradistinction with the assembly as claimed in the presently pending independent claims wherein the assembly includes a jacket which is extruded about the braided layer. The jacket is extruded about the braided layer and it is this extrusion process which enables the braided layer to be maintained in place after having been wound about the inner layer. The outer jacket also provides an exterior surface for additional protection. The jacket also allows the first layer to be bent in a tighter radius without kinking as specifically disclosed on page 6, lines 8-20. The jacket provides strength to the first layer and further allows the hose assembly to accommodate a fluid under pressure. This is in contradistinction with the hose assembly of the King patent wherein a coating is merely used to affix the braid onto the inner layer and the coating does not extend radially outwardly from the braided layer. Additionally, while a coating can be used to affix the braid to the inner liner in the hose assembly of the presently pending independent claims, the jacket is used to protect the exterior of the hose assembly and further maintains the braid in its proper configuration. In the presently pending claims, the jacket does not function to affix the braid to the inner liner, instead the jacket helps maintain the braid in proper configuration without concern of affixing the braid to the inner layer. Since the King patent does not disclose the hose assembly of the presently pending independent claims, the claims are patentable over the King patent and reconsideration of the rejection is respectfully requested.

Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the King patent in view of the Nie patent. Reconsideration of the rejection is respectfully requested.

The Office Action states that the King patent discloses the recited hose assembly comprising a tubular first layer made of a polymeric material resistant to chemical and heat degradation, which can be provided with carbon black to dissipate electrical charge; a

jacket layer disposed about the inner layer, and at least one aramid fiber braided layer disposed between the inner and jacket layers, wherein glass fibers can also be used in combination with the aramid fibers. The inner and jacket layers can be formed of a fluorocarbon material such as PTFE. Coupling means can be provided on the hose ends. However, when read more specifically, the King patent discloses a hose assembly including an inner layer 12, a braided layer attached to the exterior of the inner layer, and a polymeric dispersion of coating 14 which is coated on the braided layer 13. Numeral 11 as stated in column 2, lines 45-50, is a tubular member. The tubular member includes therein the inner organic polymeric liner 12 and the braided layer. A coating 14 is placed about the braided layer and is used to adhere the braided layer to the inner liner 12. While the coating covers the yarn fibers of the braided layer, as stated in column 4, lines 58-63, the coating does not extend radially outward from the outer periphery of the braided layer. In fact, after the material has been coated, the yarn is discernable such that the braided layer merely has a thin coating thereupon. This is in contradistinction with the assembly as claimed in the presently pending independent claims wherein the assembly includes a jacket which is extruded about the braided layer. The jacket is extruded about the braided layer and it is this extrusion process which enables the braided layer to be maintained in place after having been wound about the inner layer. The outer jacket also provides an exterior surface for additional protection. The jacket also allows the first layer to be bent in a tighter radius without kinking as specifically disclosed on page 6, lines 8-20. The jacket provides strength to the first layer and further allows the hose assembly to accommodate a fluid under pressure. This is in contradistinction with the hose assembly of the King patent wherein a coating is merely used to affix the braid onto the inner layer and the coating does not extend radially outwardly from the braided layer. Additionally, while a coating can be used to affix the braid to the inner liner in the hose assembly of the presently pending independent claims, the jacket is used to protect the exterior of the hose assembly and further maintains the braid in its proper configuration. In the presently pending claims, the jacket does not function to affix the braid to the inner liner, instead the jacket helps maintain the braid in proper configuration without concern of affixing the braid to the inner layer.

The Office Action further states that the Nie patent discloses that inner tube layers can be formed of polyketones when desired to meet the environmental needs of the hose to resist permeation of specific materials to be carried by the hose. However, the Nie patent does not disclose the hose assembly of the presently pending independent claims. Further, neither the Nie patent nor the King patent alone or in combination suggest nor teach the hose assembly of the presently pending independent claims. Since the King and Nie patents do not disclose the hose assembly of the presently pending independent claims, and there is no teaching nor suggestion in either the Nie patent or the King patent, alone nor in combination, for the hose assembly of the presently pending independent claims, the claims are patentable over the King patent in view of the Nie patent and reconsideration of the rejection is respectfully requested.

Claims 8, 9, 16 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over King in view of the Martucci patent. Reconsideration of the rejection is respectfully requested.

The Office Action states that the King patent discloses the recited hose assembly comprising a tubular first layer made of a polymeric material resistant to chemical and heat degradation, which can be provided with carbon black to dissipate electrical charge, a jacket layer disposed about the inner layer, and at least one aramid fiber braided layer disposed between the inner and jacket layers, wherein glass fibers can also be used in combination with the aramid fibers. The inner and jacket layers can be formed of a fluorocarbon material such as PTFE. Coupling means can be provided on the hose ends. However, when read more specifically, the King patent discloses a hose assembly including an inner layer 12, a braided layer attached to the exterior of the inner layer, and a polymeric dispersion of coating 14 which is coated on the braided layer 13. Numeral 11 as stated in column 2, lines 45-50, is a tubular member. The tubular member includes therein the inner organic polymeric liner 12 and the braided layer. A coating 14 is placed about the braided layer and is used to adhere the braided layer to the inner liner 12. While the coating covers the yarn fibers of the braided layer, as stated in column 4, lines 58-63, the coating does not extend radially outward from the outer periphery of the braided layer. In

fact, after the material has been coated, the yarn is discernable such that the braided layer merely has a thin coating thereupon. This is in contradistinction with the assembly as claimed in the presently pending independent claims wherein the assembly includes a jacket which is extruded about the braided layer. The jacket is extruded about the braided layer and it is this extrusion process which enables the braided layer to be maintained in place after having been wound about the inner layer. The outer jacket also provides an exterior surface for additional protection. The jacket also allows the first layer to be bent in a tighter radius without kinking as specifically disclosed on page 6, lines 8-20. The jacket provides strength to the first layer and further allows the hose assembly to accommodate a fluid under pressure. This is in contradistinction with the hose assembly of the King patent wherein a coating is merely used to affix the braid onto the inner layer and the coating does not extend radially outwardly from the braided layer. Additionally, while a coating can be used to affix the braid to the inner liner in the hose assembly of the presently pending independent claims, the jacket is used to protect the exterior of the hose assembly and further maintains the braid in its proper configuration. In the presently pending claims, the jacket does not function to affix the braid to the inner liner, instead the jacket helps maintain the braid in proper configuration without concern of affixing the braid to the inner layer.

The Office Action further states that the Martucci patent discloses the recited hose assembly comprising an inner layer provided with a carbon black strip, a reinforcement woven layer, where a jacket layer can be extruded over the reinforcement and inner layers and can be formed of polyamides, including nylon 6 and others. However, as set forth above, with regard to the King patent, the Martucci patent does not disclose extruding the jacket over the braid layer in order to maintain the braid layer in proper engagement with the inner liner. Further, the Martucci patent does not disclose the braid layer set forth in the presently pending independent claims. Accordingly, since neither the Martucci nor the King patent, alone or in combination, teach nor suggest the hose assembly and method of the presently pending independent claims, the claims are patentable over the Martucci and King patents, and reconsideration of the rejection is respectfully requested.

Claims 10 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the King patent in view of the Martucci patent. Reconsideration of the rejection is respectfully requested.

The Office Action states that the King patent discloses the recited hose assembly comprising a tubular first layer made of a polymeric material resistant to chemical and heat degradation, which can be provided with carbon black to dissipate electrical charge, a jacket layer disposed about the inner layer, and at least one aramid fiber braided layer disposed between the inner and jacket layers, wherein glass fibers can also be used in combination with the aramid fibers. The inner and jacket layers can be formed of a fluorocarbon material such as PTFE. Coupling means can be provided on the hose ends. However, when read more specifically, the King patent discloses a hose assembly including an inner layer 12, a braided layer attached to the exterior of the inner layer, and a polymeric dispersion of coating 14 which is coated on the braided layer 13. Numeral 11 as stated in column 2, lines 45-50, is a tubular member. The tubular member includes therein the inner organic polymeric liner 12 and the braided layer. A coating 14 is placed about the braided layer and is used to adhere the braided layer to the inner liner 12. While the coating covers the yarn fibers of the braided layer, as stated in column 4, lines 58-63, the coating does not extend radially outward from the outer periphery of the braided layer. In fact, after the material has been coated, the yarn is discernable such that the braided layer merely has a thin coating thereupon. This is in contradistinction with the assembly as claimed in the presently pending independent claims wherein the assembly includes a jacket which is extruded about the braided layer. The jacket is extruded about the braided layer and it is this extrusion process which enables the braided layer to be maintained in place after having been wound about the inner layer. The outer jacket also provides an exterior surface for additional protection. The jacket also allows the first layer to be bent in a tighter radius without kinking as specifically disclosed on page 6, lines 8-20. The jacket provides strength to the first layer and further allows the hose assembly to accommodate a fluid under pressure. This is in contradistinction with the hose assembly of the King patent wherein a coating is merely used to affix the braid onto the inner layer and the coating does not extend radially outwardly from the braided layer. Additionally, while a coating can

be used to affix the braid to the inner liner in the hose assembly of the presently pending independent claims, the jacket is used to protect the exterior of the hose assembly and further maintains the braid in its proper configuration. In the presently pending claims, the jacket does not function to affix the braid to the inner liner, instead the jacket helps maintain the braid in proper configuration without concern of affixing the braid to the inner layer.

The Office Action further states that the Martucci patent discloses the recited hose assembly comprising an inner layer which can be formed of an expanded or foamed fluoropolymer such as PTFE, where reinforcements are provided over the foamed layer, and end couplings are also provided. However, as set forth above, with regard to the King patent, the Martucci patent does not disclose extruding the jacket over the braid layer in order to maintain the braid layer in proper engagement with the inner liner. Further, the Martucci patent does not disclose the braid layer set forth in the presently pending independent claims. Accordingly, since neither the Martucci nor the King patent alone or in combination, teach nor suggest the hose assembly and method of the presently pending independent claims, the claims are patentable over the Martucci and King patents and reconsideration of the rejection is respectfully requested.

Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the King patent in view of the Kutnyak patent. Reconsideration of the rejection is respectfully requested.

The Office Action states that the King patent discloses the recited hose assembly comprising a tubular first layer made of a polymeric material resistant to chemical and heat degradation, which can be provided with carbon black to dissipate electrical charge, a jacket layer disposed about the inner layer, and at least one aramid fiber braided layer disposed between the inner and jacket layers, wherein glass fibers can also be used in combination with the aramid fibers. The inner and jacket layers can be formed of a fluorocarbon material such as PTFE. Coupling means can be provided on the hose ends. However, when read more specifically, the King patent discloses a hose assembly

including an inner layer 12, a braided layer attached to the exterior of the inner layer, and a polymeric dispersion of coating 14 which is coated on the braided layer 13. Numeral 11 as stated in column 2, lines 45-50, is a tubular member. The tubular member includes therein the inner organic polymeric liner 12 and the braided layer. A coating 14 is placed about the braided layer and is used to adhere the braided layer to the inner liner 12. While the coating covers the yarn fibers of the braided layer, as stated in column 4, lines 58-63, the coating does not extend radially outward from the outer periphery of the braided layer. In fact, after the material has been coated, the yarn is discernable such that the braided layer merely has a thin coating thereupon. This is in contradistinction with the assembly as claimed in the presently pending independent claims wherein the assembly includes a jacket which is extruded about the braided layer. The jacket is extruded about the braided layer and it is this extrusion process which enables the braided layer to be maintained in place after having been wound about the inner layer. The outer jacket also provides an exterior surface for additional protection. The jacket also allows the first layer to be bent in a tighter radius without kinking as specifically disclosed on page 6, lines 8-20. The jacket provides strength to the first layer and further allows the hose assembly to accommodate a fluid under pressure. This is in contradistinction with the hose assembly of the King patent wherein a coating is merely used to affix the braid onto the inner layer and the coating does not extend radially outwardly from the braided layer. Additionally, while a coating can be used to affix the braid to the inner liner in the hose assembly of the presently pending independent claims, the jacket is used to protect the exterior of the hose assembly and further maintains the braid in its proper configuration. In the presently pending claims, the jacket does not function to affix the braid to the inner liner, instead the jacket helps maintain the braid in proper configuration without concern of affixing the braid to the inner layer.

The Office Action stated that the Kutnyak patent discloses the recited method for forming a hose assembly comprising providing an inner layer, dipping the layer in an adhesive before applying a reinforcement layer over the inner layer to adhere the reinforcement to the inner tube. However, claim 18 has been amended to further include the step of extruding an outer jacket about the braided layer thereby maintaining the

braided layer in place. This is not disclosed by the Kutnyak patent, nor is it suggested by the Kutnyak patent. Since neither the King patent nor the Kutnyak patent, alone or in combination, teach nor suggest the method of the presently pending independent claim, the claim is patentable over the prior art, and reconsideration of the rejection is respectfully requested.

The remaining dependent claims not specifically discussed herein are ultimately dependent upon the independent claims. References as applied against these dependent claims do not make up for the deficiencies of those references as discussed above, the prior art references do not disclose the characterizing features of the independent claims discussed above. Hence, it is respectfully submitted that all of the pending claims are patentable over the prior art.

In view of the present amendment and foregoing remarks, reconsideration of the rejections and advancement of the case to issue are respectfully requested.

The Commissioner is authorized to charge any fee or credit any overpayment in connection with this communication to our Deposit Account No. 11-1449.

Respectfully submitted,

KOHN & ASSOCIATES

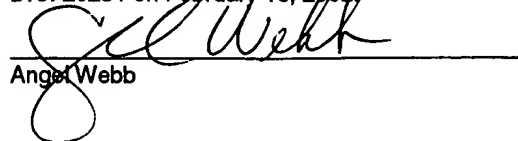


Amy E. Rinalde
Registration No. 45,791
30500 Northwestern Highway
Suite 410
Farmington Hills, Michigan 48334
(248) 539-5050

Dated: February 18, 2002

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231 on February 18, 2002.


Angel Webb

VERSION WITH MARKINGS TO SHOW CHANGES MADE

CLAIMS:

1. A hose assembly comprising:
a tubular first layer, comprising a polymeric material resistant to chemical and heat degradation;
[a jacket disposed about said layer;]
at least one [A]ramid-like layer disposed [between] about said inner and [outer] layers[.]; and
an extruded jacket disposed about said braided layer, said jacket maintaining said braided layer in place.

18. A method of making a hose assembly by:
forming a tubular first layer;
dipping the tubular first layer in an adhesive emulsion; [and]
disposing an [A]ramid-like braid about the adhesive coated first layer[.]; and
extruding a jacket over the braid.